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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,339	08/01/2000	Hiroshi Kinemura	55013(1992)	7281

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EDWARDS & ANGELL, LLP
P.O. BOX 55874
BOSTON, MA 02205

EXAMINER	
HUYNH, SON P	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/629,339	KINEMURA, HIROSHI	
	Examiner	Art Unit	
	Son P Huynh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koperda (US 5,790,806), in view of Ollikainen et al. (US 6,377,981), and further in view of Jones et al. (US 6,469,681).

Regarding claim 1, Koperda teaches a cable modem comprising:

a cable modem (figure 3) proper that is configured so as to be connected by way of a coaxial cable (cable network) to a CATV network (via cable connector 321-figure 3 and

col. 10, line 56+) and so as to communicate information to/from the CATV network and the cable modem proper (figure 3 and col. 10, line 65+);

an expansion unit (interface 315 and connector 316 – figure 3) being configured so as to have a LAN function that permits communication with an information processing terminal (user personal computer 40- col. 13, line 6+), where the information processing terminal is located remote from the cable modem (cable modem 401 is connected user personal computer 400 via LAN interface 315 and Ethernet connection 316 (see figure 3 and col. 10, line 57+); when the expansion unit (interface 315 and connector 316) is operably coupled to the cable modem proper, information is communicated to/from the CATV network and the remotely located information processing via the cable modem proper and the expansion unit (data transmitted upstream from user personal computer 400 to head end 402 through cable network and data transmitted downstream from head end 402 though cable network to personal computer 400 via modem 401, Interface 315, connector 316 – see figures 3-4 and col. 10, line 57+). However, Koperda does not specifically disclose the expansion unit being configured so as to have a wireless LAN function that permits communication with an information processing terminal on a wireless basis; a connecting member that removably and operably couples the cable modem proper and the expansion unit together by use of a plug and a connector.

Ollikainen teaches the expansion unit (wireless LAN interface and antenna 28 – see the figure) being configured so as to have a wireless LAN function that permits communication with an information processing terminal (personal computer 35 – see

the figure) on a wireless basis. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda with the teaching as taught by Ollikainen in order to provide more convenient when install the system. However, neither Koperda nor Ollikainen specifically discloses a connecting member that removably and operably couples the cable modem proper and the expansion unit together by use of a plug and a connector.

Jones teaches a connecting member that removably and operably couples the cable modem proper and the expansion unit together by use of a plug and a connector (the antenna is coupled to an wireless LAN adapter or wireless modem using cable plug connector, and the antenna is removable-Col. 5, line 10+; a wireless circuitry is activated when an antenna is inserted into the jack and wired circuitry is activated when the antenna is removed from the jack- col. 3, lines 50+60, col. 6, line 35+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda and Ollikainen to use the teaching as taught by Jones in order to improve flexibility use to the system.

Regarding claim 2, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 1. Jones further discloses the removable antenna is plugged into an apparatus so that the apparatus utilizes wireless devices such as a wireless LAN adapter or a wireless modem (col. 5, line 10+). Necessarily, the plug is a plug for a LAN cable and the connector is a connector for a LAN cable.

Regarding claim 3, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 1. Koperda further teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). The status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Koperda does not explicitly disclose that the output level and a data transfer rate are varied according to measurement result. Official Notice is taken that changing the output level and transfer rate according to the measurement result in order to prevent overflow or underflow in data transmission is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda, Ollikainen and Jones to incorporate the well-known technique in the art in order to minimize bit error rate thereby improve quality of service.

Regarding claim 4, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 3. Neither Koperda, nor Ollikainen, nor Jones specifically discloses adjusting output level according to the measurement results. Official Notice is taken that adjusting output level according to the measurement results to an interface portion of the information-processing terminal that communicates with the cable modem on a wireless basis to minimize bit rate error in data transmission

system is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda, Ollikainen and Jones to incorporate the well-known feature in the art in order to reduce error bit rate in data transmission system thereby improve quality of service.

Regarding claim 5, Koperda teaches the cable modem proper comprises circuitry including tuner (tuners 301, 302), demodulator 305, modulator 304, CPU (processor 312). The tuner selecting information from the CATV network, converting the selected information into an IF and then feeding it to the demodulator 305, and conversely transmitting information fed from the modulator 304 to the CATV network (see figure 3); Koperda further discloses address recognition 303 for screening data to determine which data is destined for this modem or for another modem in the network to insure that only data with address addresses corresponding to the modem are received. The processor 312 controls the timing and controlling circuit 306 to coordinate functions. The modem has direct memory access which enable the received data to be stored directly in the RAM 313. The processor 312 then determines the destination of the received information and whether to alter the format of the information based upon its destination (see col. 11, line 19+). Necessarily, the cable modem comprises first medium access controller classifying information fed from the demodulator and information fed through the expansion unit from the information processing terminal into signals to be processed inside the cable modem and signal to be transmitted to the information processing terminal and to the CATV network; and a second medium access controller converting

and exchanging data between the cable modem proper and the expansion unit (send received information to the LAN).

Regarding claim 6, Koperda teaches the CPU (processor 312) controls direction and timing in and with which to output information (see col. 11, lines 35-67).

Regarding claim 7, Koperda teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). Koperda further teaches status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Necessarily, the CPU measures a bit error rate and controls an output level of the expansion unit according to the measured bit error rate.

Regarding claim 8, Koperda teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). Koperda further teaches status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Necessarily, the CPU measures a bit error rate and controls a data transfer rate according to the measured bit error rate.

Regarding claim 9, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 1. Jones further discloses the apparatus comprises a switching circuitry which automatically activates or switches to a wireless device when the antenna is inserted into a connector. When the antenna is removed, the device switches to a wired device. For example, and not by way of limitation, a combination wireless network adapter and wired network adapter may be contained in a single expansion card. When the antenna is inserted, the circuitry automatically activates the wireless adapter and when the antenna is removed, the wired adapter is activated. The same principle may be used for a wired/wireless modem combination (col. 3, line 50+). Necessarily, the cable modem proper includes a coupling mechanism (e.g. switching circuitry, connector) that is configured and arranged so the cable modem is configurable to perform either wired or wireless communications, where when wireless communications are desired the expansion unit (antenna) is operably coupled to the cable modem proper via the coupling mechanism.

Regarding claim 10, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 5. Jones further discloses the apparatus comprises a switching circuitry which automatically activates or switches to a wireless device when the antenna is inserted into a connector. When the antenna is removed, the device switches to a wired device. For example, and not by way of limitation, a combination wireless network adapter and wired network adapter may be contained in a single expansion card. When the antenna is inserted, the circuitry automatically

activates the wireless adapter and when the antenna is removed, the wired adapter is activated. The same principle may be used for a wired/wireless modem combination (col. 3, line 50+). Necessarily, the cable modem proper includes a coupling mechanism (e.g. switching circuitry, connector) that is configured and arranged so the cable modem is configurable to perform either wired or wireless communications, where when wireless communications are desired the expansion unit (antenna) is operably coupled to the cable modem proper via the coupling mechanism.

Regarding claim 11, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 1. Ollikainen further discloses when the cable modem proper (26) and the expansion unit (antenna and wireless LAN interface) are operably coupled to each other, a unitary structure (cyberstation 20) is thereby formed (see the figure).

Regarding claim 12, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 5. Ollikainen further discloses when the cable modem proper (26) and the expansion unit (antenna and wireless LAN interface) are operably coupled to each other, a unitary structure (cyberstation 20) is thereby formed (see the figure).

Regarding claim 13, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 2. Jones further teaches the cable modem proper

is configured so as to include one of the plug or the connector and wherein the expansion unit is configured so as to include the other of the plug or the connector (figures 2-4 and col. 6, line 10+).

4. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koperda (US 5,790,806), in view of Ollikainen et al. (US 6,377,981), and further in view of Naiff (US 5,982,363).

Regarding claim 1, Koperda teaches a cable modem comprising:
a cable modem (figure 3) proper that is configured so as to be connected by way of a coaxial cable (cable network) to a CATV network (via cable connector 321-figure 3 and col. 10, line 56+) and so as to communicate information to/from the CATV network and the cable modem proper (figure 3 and col. 10, line 65+);
an expansion unit (interface 315 and connector 316 – figure 3) being configured so as to have a LAN function that permits communication with an information processing terminal (user personal computer 40- col. 13, line 6+), where the information processing terminal is located remote from the cable modem (cable modem 401 is connected user personal computer 400 via LAN interface 315 and Ethernet connection 316 (see figure 3 and col. 10, line 57+); when the expansion unit (interface 315 and connector 316) is operably coupled to the cable modem proper, information is communicated to/from the CATV network and the remotely located information processing via the cable modem proper and the expansion unit (data transmitted upstream from user personal computer

400 to head end 402 through cable network and data transmitted downstream from head end 402 though cable network to personal computer 400 via modem 401, Interface 315, connector 316 – see figures 3-4 and col. 10, line 57+). However, Koperda does not specifically disclose the expansion unit being configured so as to have a wireless LAN function that permits communication with an information processing terminal on a wireless basis; a connecting member that removably and operably couples the cable modem proper and the expansion unit together by use of a plug and a connector.

Ollikainen teaches the expansion unit (wireless LAN interface and antenna 28 – see the figure) being configured so as to have a wireless LAN function that permits communication with an information processing terminal (personal computer 35 – see the figure) on a wireless basis. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda with the teaching as taught by Ollikainen in order to provide more convenient when install the system. However, neither Koperda nor Ollikainen specifically discloses a connecting member that removably and operably couples the cable modem proper and the expansion unit together by use of a plug and a connector.

Naiff discloses providing a peripheral card for PC 20 that is connected to the motherboard of the PC via a conventional expansion slot, which provides, e.g., a PCI interface. Instead of an internal card, the peripheral could comprise an external stand-alone box that interfaces with the PC 20 via a serial or parallel port (col. 5, line 30+).

The communications between TV and PC 20 are provided via cable 14 (figure 1). The use of the in home cable wiring 14 can be replaced by wireless link 104 when user interface module 24 of Fig. 1 is replaced with a wireless user interface module 100 and the wireless interface 102 is used at the other end of the cable wiring 14 (figures 3-4 and col. 7, line 53+). The PC comprises a modem –col. 6, line 27+). Necessarily, a connecting member that removably and operably couples the cable modem proper and the expansion unit (card 40 and wireless interface) together by use of a plug and a connector (e.g. PCI interface 94, or TV direct port 60-col. 7, line 55+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda and Ollikainen to use the teaching as taught by Naiff in order to improve flexibility use to the system.

Regarding claim 2, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 1. Naiff further discloses personal computer 20 receives data from external network and provides to plurality of consumer television appliances coupled thereto, such as VCR's, television sets, video cameras, and the like (figure 1 and col. 4, line 30+). Interface card 40 is plugged into expansion slot of PC 20, the TV direct port 60 of the card can be used as the input to a transceiver of wireless interface 102 for a wireless implementation in which communication between the PC and wireless interface 100 of the user television (col. 7, line 55+). Necessarily, the plug is a plug for a LAN cable and the connector is a connector for a LAN cable.

Regarding claim 3, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 1. Koperda further teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). The status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Koperda does not explicitly disclose that the output level and a data transfer rate are varied according to measurement result. Official Notice is taken that changing the output level and transfer rate according to the measurement result in order to prevent overflow or underflow in data transmission is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Koperda, Ollikainen and Naiff to incorporate the well-known technique in the art in order to minimize bit error rate thereby improve quality of service.

Regarding claim 4, Koperda in view of Ollikainen and Jones teaches a cable modem as discussed in the rejection of claim 3. Neither Koperda, nor Ollikainen, nor Naiff specifically discloses adjusting output level according to the measurement results. Official Notice is taken that adjusting output level according to the measurement results to an interface portion of the information-processing terminal that communicates with the cable modem on a wireless basis to minimize bit rate error in data transmission system is well known in the art. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Koperda, Ollikainen and Naiff to incorporate the well-known feature in the art in order to reduce error bit rate in data transmission system thereby improve quality of service.

Regarding claim 5, Koperda teaches the cable modem proper comprises circuitry including tuner (tuners 301, 302), demodulator 305, modulator 304, CPU (processor 312). The tuner selecting information from the CATV network, converting the selected information into an IF and then feeding it to the demodulator 305, and conversely transmitting information fed from the modulator 304 to the CATV network (see figure 3); Koperda further discloses address recognition 303 for screening data to determine which data is destined for this modem or for another modem in the network to insure that only data with address addresses corresponding to the modem are received. The processor 312 controls the timing and controlling circuit 306 to coordinate functions. The modem has direct memory access which enable the received data to be stored directly in the RAM 313. The processor 312 then determines the destination of the received information and whether to alter the format of the information based upon its destination (see col. 11, line 19+). Necessarily, the cable modem comprises first medium access controller classifying information fed from the demodulator and information fed through the expansion unit from the information processing terminal into signals to be processed inside the cable modem and signal to be transmitted to the information processing terminal and to the CATV network; and a second medium access controller converting

and exchanging data between the cable modem proper and the expansion unit (send received information to the LAN).

Regarding claim 6, Koperda teaches the CPU (processor 312) controls direction and timing in and with which to output information (see col. 11, lines 35-67).

Regarding claim 7, Koperda teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). Koperda further teaches status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Necessarily, the CPU measures a bit error rate and controls an output level of the expansion unit according to the measured bit error rate.

Regarding claim 8, Koperda teaches processor 312 controls timing and controlling circuit 306 when to transmit and when not to transmit (see col. 11, line 35+). Koperda further teaches status information such as transmit error bit rate, receive error bit rate, packets sent, throughput, etc. may be provided over the interface; and the user modem includes a transceiver for generating the proper signal levels for 10BASE T Ethernet (see col. 12, lines 12-60). Necessarily, the CPU measures a bit error rate and controls a data transfer rate according to the measured bit error rate.

Regarding claim 9, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 1. Naiff further discloses the card comprises TV direct port 60, cable TV I/O port 62 and telephone return port 64. The TV direct port 60 of the television interface card 40 can be used as the input to a transceiver of wireless interface 102 for a wireless implementation in which communications between the PC 20 and the user interface module 24 are carried by RF or IR signals. Alternatively, the TV direct port can be used as a direct connection (e.g. coaxial cable) to the user's television (col. 7, line 55+). Necessarily, the cable modem proper includes a coupling mechanism that is configured and arranged so the cable modem is configurable to perform either wired or wireless communications, where when wireless communications are desired the expansion unit (interface card 40 or wireless interface 102) is operably coupled to the cable modem proper via the coupling mechanism (PCI interface or TV direct TV port 60).

Regarding claim 10, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 1. Naiff further discloses the card comprises TV direct port 60, cable TV I/O port 62 and telephone return port 64. The TV direct port 60 of the television interface card 40 can be used as the input to a transceiver of wireless interface 102 for a wireless implementation in which communications between the PC 20 and the user interface module 24 are carried by RF or IR signals. Alternatively, the TV direct port can be used as a direct connection (e.g. coaxial cable) to the user's television (col. 7, line 55+). Necessarily, the cable modem proper includes a coupling

mechanism that is configured and arranged so the cable modem is configurable to perform either wired or wireless communications, where when wireless communications are desired the expansion unit (interface card 40 or wireless interface 102) is operably coupled to the cable modem proper via the coupling mechanism (PCI interface or TV direct TV port 60).

Regarding claim 11, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 1. Ollikainen further discloses when the cable modem proper (26) and the expansion unit (antenna and wireless LAN interface) are operably coupled to each other, a unitary structure (cyberstation 20) is thereby formed (see the figure).

Regarding claim 12, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 5. Ollikainen further discloses when the cable modem proper (26) and the expansion unit (antenna and wireless LAN interface) are operably coupled to each other, a unitary structure (cyberstation 20) is thereby formed (see the figure).

Regarding claim 13, Koperda in view of Ollikainen and Naiff teaches a cable modem as discussed in the rejection of claim 2. Naiff further teaches the cable modem proper is configured so as to include one of the plug or the connector and wherein the expansion

unit is configured so as to include the other of the plug or the connector (figures 1, 3, 4 and col. 7, line 55+).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eames et al. (US 6,493,875) teaches in home wireless.

Hylton et al. (US 5,708,961) teaches wireless on premises video distribution using digital multiplexing.

Flint et al. (US 5,748,443) teaches mating adapter between a module and chassis of a computer processing system.

Albert et al. (US 5,907,801) teaches apparatus and method for optimizing wireless financial transaction.

Thompson et al. (US 6,529,743) teaches universal wireless telephone to modem adapter.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son P. Huynh
June 14, 2004

VIVEK SRIVASTAVA
PRIMARY EXAMINER